



## QC ABSTRACT

NAME OF WORK: "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"

| SL NO            | Item Of Work                      | Name of Test                            | Frequency of Test/Quantity | Executed Quantity | Number of Tests Required | Number of Tests Conducted |
|------------------|-----------------------------------|-----------------------------------------|----------------------------|-------------------|--------------------------|---------------------------|
| <b>Materials</b> |                                   |                                         |                            |                   |                          |                           |
| 1                | Cement                            | Fineness by dry sieving                 | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Finess by Air permeability method       | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Density                                 | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Standard Consistency                    | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Initial Setting time                    | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Final Setting time                      | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Soundness (Le Chatelier's Method)       | One Test                   |                   | 1                        | 1                         |
| 2                | Coarse aggregate(40 mm down size) | Compressive Strength                    | One Test                   |                   | 1                        | 1                         |
|                  |                                   | SIEVE ANALYSIS                          | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Flakiness Index                         | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Elongation Index                        | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Specific Gravity                        | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Bulk Density(Loose)                     | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Bulk Density(Compacted)                 | One Test                   |                   | 1                        | 1                         |
| 3                | Coarse aggregate(20 mm down size) | Water Absorption                        | One Test                   |                   | 1                        | 1                         |
|                  |                                   | SIEVE ANALYSIS                          | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Flakiness Index                         | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Elongation Index                        | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Specific Gravity                        | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Bulk Density(Loose)                     | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Bulk Density(Compacted)                 | One Test                   |                   | 1                        | 1                         |
| 4                | Fine aggregate                    | Water Absorption                        | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Specific Gravity                        | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Material finer than 75 micron           | One Test                   |                   | 1                        | 1                         |
|                  |                                   | SIEVE ANALYSIS                          | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Aggregate crushing Value                | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Aggregate Impact Value                  | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Water Absorption                        | One Test                   |                   | 1                        | 1                         |
| 5                | Steel                             | Bend test                               | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Tensile Test                            | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Yield Test                              | One Test                   |                   | 1                        | 1                         |
|                  |                                   | ReBend test                             | One Test                   |                   | 1                        | 1                         |
| 6                | KERB                              | Core Compressive strength               | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Corrected Cylinder Compressive strength | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Equivalent Cube Compressive strength    | One Test                   |                   | 1                        | 1                         |
| 7                | Precast (100mm)                   | Core Compressive Strength               | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Corrected Cylinder Compressive Strength | One Test                   |                   | 1                        | 1                         |
|                  |                                   | Equivalent Cube Compressive Strength    | One Test                   |                   | 1                        | 1                         |
| 8                | PCC(M15)                          | Compressive Strength(7days and 28days)  | 2 set /6-15 cum            | 5.69              | 4                        | 4                         |
| 9                | RCC(M20)                          | Compressive Strength(7days and 28days)  | 4 set /31-50 cum           | 48.09             | 8                        | 8                         |
| 10               | Cement Concrete Pavement (M30)    | Compressive Strength(7days and 28days)  | 6 set /100-150 cum         | 102.89            | 12                       | 12                        |

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ಮಾಪದ ಮಾಪನ ಮಾಡಲಾಗಿದೆ-106

*[Signature]*



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## TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : CP-2021-10-12-16 Date: 21-01-21  
Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
Agency : Sri Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
Customer's Reference : BBMP/EE/YNK D/EPMT-5/W.O/212/2020-21  
Source of Sample : Sample supplied by Agency  
Sample Condition : Satisfactory  
Date of Receipt : 18-01-21  
Sample Type : Birla Super 53grade  
Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,  
IS 4031 (Part 1,2,3,4,5, 6,11):1988  
IS 4031 Part 1 DETERMINATION OF FINENESS BY DRY SIEVING, Clause 4.4  
IS 4031 Part 2, Determination of Fineness by Blaine Air Permeability Method, Clause 5  
IS 4031 Part 3, Determination of Soundness, Clause 5, Clause 6  
IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5  
IS 4031 Part 5, Determination of Initial & Final Setting Time, Clause 5  
IS 4031 Part 11, DETERMINATION OF DENSITY , Clause 6

Date of test : 18-01-21

Environmental Conditions during test : Temperature: 26°C  
Humidity: 72%

| SL.No. | Physical properties                                          | Results     | Requirement as per IS 12269: 2013 |
|--------|--------------------------------------------------------------|-------------|-----------------------------------|
| 1      | Fineness by dry sieving (%)                                  | 1.76        | —                                 |
| 2      | Fineness by Air permeability method (m <sup>2</sup> /kg.Min) | 292.1       | 225m <sup>2</sup> /kg, Min        |
| 3      | Density (gm/cc)                                              | 3.12        | —                                 |
| 4      | Standard Consistency (%)                                     | 28.0%       | Not specified                     |
| 5      | Initial Setting time                                         | 155 minutes | Not less than 30 minutes          |
| 6      | Final Setting time                                           | 270 minutes | Not more than 600 minutes         |
| 7      | Soundness (Le Chatelier's Method)                            | 1mm         | Not more than 10 mm               |

\* The results obtained are satisfactory as per standard requirements.

Note:

The results pertain to the samples received and tested

All information furnished by Customer/Representative

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Samples will be disposed after 30 days from the date of issue of test certificate

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Quality Manager

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## TEST REPORT OF PHYSICAL PROPERTIES OF CEMENT - 53 Grade

Lab ID : CP-2021-10-12-16 Date: 15-02-21  
Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
Agency : Sri Ravikumar Gangadhar No:17, Ambedkar layout, 3rd Cross, Magadir Main, Vijayanagara, Bangalore-560023  
Customer's Reference : BBMP/EE/YNK.D/EPMT-5/W.O/212/2020-21  
Source of Sample : Sample supplied by Agency  
Sample Condition : Satisfactory  
Date of Receipt : 18-01-21  
Sample Type : Birla Super 53 grade  
Reference to BIS codes : IS 12269 : 2013, 53 Grade Ordinary Portland cement Specification ,  
IS 4031 Part 4, Determination of Consistency of Standard Cement Paste, Clause 5  
IS 4031 Part 6, Determination of Compressive Strength, Clause 6  
Date of test : 18-01-21  
Environmental Conditions during test : Temperature: 26°C  
Humidity: 72%

| Compressive Strength |                     |                       |                                    |
|----------------------|---------------------|-----------------------|------------------------------------|
| Sl.No.               | Physical properties | Results               | Requirement as per IS 12269: 2013  |
| 1                    | 3 Days              | 28.5N/mm <sup>2</sup> | Not less than 27 N/mm <sup>2</sup> |
| 2                    | 7 Days              | 39.0N/mm <sup>2</sup> | Not less than 37 N/mm <sup>2</sup> |
| 3                    | 28 Days             | 58.5N/mm <sup>2</sup> | Not less than 53 N/mm <sup>2</sup> |

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Quality Manager



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## TEST REPORT ON COARSE AGGREGATES

Lab ID : CP-2021-10-12-16 Date: 20-01-21  
 Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
 Agency : Sri Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
 Customer Reference : BBMP/EE/YNK.D/EPMT-5/W.O/212/2020-21  
 Source of Sample : Sample supplied by Agency  
 Sample Condition : Satisfactory  
 Date of Receipt : 18-01-21  
 Sample Type/ Size : 20mm down size coarse aggregate  
 Reference to BIS codes : IS: 383:2016 (Specification for Coarse and fine Aggregates )  
 IS: 2386 :1963(Part - 1,3,4) RA2011  
 IS 2386 Part 1: Particle Size and Shape  
 IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption  
 IS 2386 Part 4: Mechanical Properties  
 Date of test : 18-01-21

### SIEVE ANALYSIS (PARTICLE SIZE DISTRIBUTION) OF 20MM DOWN COARSE AGGREGATE:

Total weight taken : 5000 grams

| Sample No. | Sieve No. | Weight Retained in gms | Cumulative Weight Retained in gms | % Cumulative Weight Retained | % Passing | Required as per IS 383:2016 |
|------------|-----------|------------------------|-----------------------------------|------------------------------|-----------|-----------------------------|
| 1          | 40 mm     | 0                      | 0                                 | 0                            | 100       | 100                         |
| 2          | 20 mm     | 236                    | 236                               | 4.7                          | 95.3      | 90-100                      |
| 3          | 10 mm     | 2629                   | 2865                              | 57.3                         | 42.7      | 25-55                       |
| 4          | 4.75 mm   | 1779                   | 4644                              | 92.9                         | 7.1       | 0-10                        |
| 5          | Pan       | 356                    | 5000                              | 100                          | 0         | -                           |

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## TEST REPORT ON COARSE AGGREGATES

Lab ID

: CP-2021-10-12-16

Date: 20-01-21

### PHYSICAL PROPERTIES

| Sl.no | Tests                          | Result | Requirements as per IS:383-2016                                                                                                                                                                                                               |
|-------|--------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | Flakiness Index(%)             | 9.3    | Combined Flakiness & Elongation Index Shall not Exceed 40% for Uncrushed & Crushed Aggregate                                                                                                                                                  |
| 2     | Elongation Index(%)            | 10.7   |                                                                                                                                                                                                                                               |
| 3     | Specific Gravity               | 2.67   | —                                                                                                                                                                                                                                             |
| 4     | Bulk Density(Loose) (Kg/l)     | 1.54   | —                                                                                                                                                                                                                                             |
| 5     | Bulk Density(Compacted) (Kg/l) | 1.58   | —                                                                                                                                                                                                                                             |
| 6     | Water Absorption(%)            | 0.22   | —                                                                                                                                                                                                                                             |
| 7     | Aggregate crushing Value(%)    | 24.5   | Max 30% for Aggregates to be used in concrete for wearing Surface, In case Aggregate Crushing Value Exceeds 30% then the test for ten percent fines should be conducted for Aggregates to be used in concrete other than for wearing Surface. |
| 8     | Aggregate Impact Value(%)      | 23.5   | 30% for Aggregates to be used in concrete for wearing Surface,<br>45% for Aggregates to be used in concrete other than for wearing Surface.                                                                                                   |

\* The results obtained are satisfactory as per standard requirements.

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Quality Manager

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## TEST REPORT OF FINE AGGREGATE

|                        |   |                                                                                                                                                                                                                    |                |
|------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| Lab ID                 | : | CP-2021-10-12-16                                                                                                                                                                                                   | Date: 20-01-21 |
| Customer               | : | Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.                                                                                                                              |                |
| Address                | : | Yelahanka Satellite Town Sub Division, BBMP, Bangalore.                                                                                                                                                            |                |
| Project Name           | : | "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"                                                                                                     |                |
| Agency                 | : | Sri.Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023                                                                                                               |                |
| Customer's Reference   | : | BBMP/EE/YNK.D/EPMT-5/W.O/212/2020-21                                                                                                                                                                               |                |
| Source of Sample       | : | Sample supplied by Agency                                                                                                                                                                                          |                |
| Sample Condition       | : | Satisfactory                                                                                                                                                                                                       |                |
| Date of Receipt        | : | 18-01-21                                                                                                                                                                                                           |                |
| Sample Type            | : | Fine Aggregate                                                                                                                                                                                                     |                |
| Reference to BIS codes | : | IS 383 : 2016 (Specification for Coarse and fine Aggregates)<br>IS: 2386 :1963(Part - 1, 3) RA2012<br>IS 2386 Part 1: Particle Size and Shape<br>IS 2386 Part 3: Specific gravity, Density, Voids,Water Absorption |                |
| Date of test           | : | 18-01-21                                                                                                                                                                                                           |                |

**Total weight taken** : 1000 grams

| Sl.no | Sieve Size | Weight Retained (gms) | Cumulative Weight Retained (gms) | % Cumulative Weight Retained | % Passing | Requirement as per IS 383:2016 |                 |                  |                 |
|-------|------------|-----------------------|----------------------------------|------------------------------|-----------|--------------------------------|-----------------|------------------|-----------------|
|       |            |                       |                                  |                              |           | Grading Zone I                 | Grading Zone II | Grading Zone III | Grading Zone IV |
| 1     | 10 mm      | 0                     | 0                                | 0.0                          | 100.0     | 100                            | 100             | 100              | 100             |
| 2     | 4.75 mm    | 27                    | 27                               | 2.7                          | 97.3      | 90-100                         | 90-100          | 90-100           | 95-100          |
| 3     | 2.36 mm    | 55                    | 82                               | 8.2                          | 91.8      | 60-95                          | 75-100          | 85-100           | 95-100          |
| 4     | 1.18 mm    | 239                   | 321                              | 32.1                         | 67.9      | 30-70                          | 55-90           | 75-100           | 90-100          |
| 5     | 600 micron | 205                   | 526                              | 52.6                         | 47.4      | 15-34                          | 35-59           | 60-79            | 80-100          |
| 6     | 300 micron | 203                   | 729                              | 72.9                         | 27.1      | 5-20                           | 8-30            | 12-40            | 15-50           |
| 7     | 150 micron | 191                   | 920                              | 92.0                         | 8.0       | 0-10                           | 0-10            | 0-10             | 0-15            |
| 8     | Pan        | 80                    | 1000                             | 100.0                        | 0.0       | ---                            | ---             | ---              | ---             |

Result : The tested Sample Conforms to Grading Zone II

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M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL  
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES



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## TEST REPORT OF PRECAST COVER SLAB

Lab ID : CP-2021-10-12-16 Date: 15-09-21

Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.

Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.

Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"

Agency : Sri Ravikumar Gangadhar No 17, Ambedkar layout, 3rd Cross, Magadir Main, Vijayanagara, Bangalore-560023

Customer's Reference : BBMP/EE/YNK D/EPMT-5/W O/212/2020-21

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 11-09-21

Sample Type /Size : Precast Cover Slab(100mm)

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete

Date of test : 11/09/2021

| Sl. No. | Identification Mark | Diameter of the core | Height of the core | Weight of the core | Area    | Failure Load | Core Compressive strength | Corrected Cylinder Compressive strength | Equivalent Cube Compressive strength |
|---------|---------------------|----------------------|--------------------|--------------------|---------|--------------|---------------------------|-----------------------------------------|--------------------------------------|
|         |                     | (mm)                 | (mm)               | (kg)               | (Sq.mm) | (KN)         | (N/mm <sup>2</sup> )      | (N/mm <sup>2</sup> )                    | (N/mm <sup>2</sup> )                 |
| 1       | Cover Slab-1        | 75.51                | 100.48             | 1.116              | 4477    | 75.9         | 17.0                      | 15.8                                    | 19.7                                 |
| 2       | Cover Slab-2        | 75.49                | 100.52             | 1.122              | 4475    | 78.3         | 17.5                      | 16.3                                    | 20.3                                 |
| 3       | Cover Slab-3        | 75.50                | 100.51             | 1.118              | 4476    | 77.5         | 17.3                      | 16.1                                    | 20.1                                 |

The results obtained are satisfactory as per standard requirements.

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15/09/2021  
11:20 AM  
11/09/2021  
11:20 AM  
11/09/2021  
11:20 AM



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R KARTHIK RECHAN  
Authorized Signatory  
Quality Manager



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## TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2021-10-12-16 Date: 19/05/2021

Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.

Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.

Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"

Agency : Sri Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023

Customer's Reference : BBMP/EE/YNK.D/EPMT-5/W.O/212/2020-21

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 14-05-21

Customer ID : PCC

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M15 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5

Date of test : 19/05/2021

| Sl. No. | Identification Mark | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|---------|---------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1       | PCC                 | M15               | 12/05/2021      | 19/05/2021      | 151.78 X<br>151.81 X<br>149.45 | 23042                        | 8.759                     | 293.8             | 12.8                                      | 12.3                                              |
| 2       | PCC                 | M15               | 12/05/2021      | 19/05/2021      | 150.91 X<br>151.21 X<br>149.16 | 22819                        | 8.782                     | 275.4             | 12.1                                      |                                                   |
| 3       | PCC                 | M15               | 12/05/2021      | 19/05/2021      | 151.02 X<br>151.95 X<br>151.59 | 22948                        | 8.587                     | 276.6             | 12.1                                      |                                                   |

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Quality Manager

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## TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2021-10-12-16 Date: 06/05/2021  
 Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
 Agency : Sri.Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
 Customer's Reference : BBMP/EE/YNK.D/EPMT-5/W.O/212/2020-21  
 Source of Sample : Sample supplied by Agency  
 Sample Condition : Satisfactory  
 Date of Receipt : 01-05-21  
 Customer ID : Drain Bottom Slab Concrete  
 Sample Type /Size : 150X150X150 mm  
 Sample grade/Age : M20 / 7 Days Compressive Strength  
 Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete C1.5  
 Date of test : 06/05/2021

| SL No. | Identification Mark        | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen | Cross sectional area | Weight of the sample | Failure Load | Compressive strength | Average Compressive Strength |
|--------|----------------------------|-------------------|-----------------|-----------------|---------------------------|----------------------|----------------------|--------------|----------------------|------------------------------|
|        |                            |                   |                 |                 | (mm)                      | (Sq.mm)              | (kg)                 | (KN)         | (N/mm <sup>2</sup> ) | (N/mm <sup>2</sup> )         |
| 1      | Drain Bottom Slab Concrete | M20               | 29/04/2021      | 06/05/2021      | 151.41 X                  | 22928                | 8.630                | 413.8        | 18.0                 | 18.5                         |
|        |                            |                   |                 |                 | 151.43 X                  |                      |                      |              |                      |                              |
|        |                            |                   |                 |                 | 151.27                    |                      |                      |              |                      |                              |
| 2      | Drain Bottom Slab Concrete | M20               | 29/04/2021      | 06/05/2021      | 150.52 X                  | 22481                | 8.196                | 420.8        | 18.7                 |                              |
|        |                            |                   |                 |                 | 149.36 X                  |                      |                      |              |                      |                              |
|        |                            |                   |                 |                 | 149.10                    |                      |                      |              |                      |                              |
| 3      | Drain Bottom Slab Concrete | M20               | 29/04/2021      | 06/05/2021      | 149.83 X                  | 22412                | 8.080                | 416.9        | 18.6                 |                              |
|        |                            |                   |                 |                 | 149.58 X                  |                      |                      |              |                      |                              |
|        |                            |                   |                 |                 | 152.00                    |                      |                      |              |                      |                              |

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ಯಶವಂತ ಉಪನಗರ ಉಪವಿಭಾಗ,  
ಬಿ.ಬಿ.ಸಿ. ಬೆಂಗಳೂರು-108



FOR CIVIL PRO.  
R. KARTHIK RECHAN  
Authorized Signatory  
Quality Manager

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\*\*\*\*\*End of Report\*\*\*\*\*

Format No. CP/TF/01

### TEST REPORT OF CEMENT CONCRETE CUBES

|                               |   |                                                                                                                |                         |
|-------------------------------|---|----------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Lab ID</b>                 | : | <b>CP-2021-10-12-16</b>                                                                                        | <b>Date: 27/05/2021</b> |
| <b>Customer</b>               | : | Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.                          |                         |
| <b>Address</b>                | : | Yelahanka Satellite Town Sub Division, BBMP, Bangalore.                                                        |                         |
| <b>Project Name</b>           | : | "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division" |                         |
| <b>Agency</b>                 | : | Sri.Ravikumar Gangadhar No.17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023           |                         |
| <b>Customer's Reference</b>   | : | BBMP/EE/YNK D/EPMT-5/W.O/212/2020-21                                                                           |                         |
| <b>Source of Sample</b>       | : | Sample supplied by Agency                                                                                      |                         |
| <b>Sample Condition</b>       | : | Satisfactory                                                                                                   |                         |
| <b>Date of Receipt</b>        | : | 01-05-21                                                                                                       |                         |
| <b>Customer ID</b>            | : | Drain Bottom Slab Concrete                                                                                     |                         |
| <b>Sample Type /Size</b>      | : | 150X150X150 mm                                                                                                 |                         |
| <b>Sample grade/Age</b>       | : | M20 / 28 Days Compressive Strength                                                                             |                         |
| <b>Reference to BIS codes</b> | : | IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5                                                  |                         |
| <b>Date of test</b>           | : | 27/05/2021                                                                                                     |                         |

| Sl. No. | Identification Mark        | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen<br>(mm) | Cross sectional area<br>(Sq.mm) | Weight of the sample<br>(kg) | Failure Load<br>(KN) | Compressive strength<br>(N/mm <sup>2</sup> ) | Average Compressive Strength<br>(N/mm <sup>2</sup> ) |
|---------|----------------------------|-------------------|-----------------|-----------------|-----------------------------------|---------------------------------|------------------------------|----------------------|----------------------------------------------|------------------------------------------------------|
| 1       | Drain Bottom Slab Concrete | M20               | 29/04/2021      | 27/05/2021      | 151.06 X                          | 22600                           | 8.195                        | 522.3                | 23.1                                         | 22.8                                                 |
|         |                            |                   |                 |                 | 149.61 X                          |                                 |                              |                      |                                              |                                                      |
|         |                            |                   |                 |                 | 151.65                            |                                 |                              |                      |                                              |                                                      |
| 2       | Drain Bottom Slab Concrete | M20               | 29/04/2021      | 27/05/2021      | 149.44 X                          | 22532                           | 8.449                        | 497.7                | 22.1                                         |                                                      |
|         |                            |                   |                 |                 | 150.78 X                          |                                 |                              |                      |                                              |                                                      |
|         |                            |                   |                 |                 | 149.24                            |                                 |                              |                      |                                              |                                                      |
| 3       | Drain Bottom Slab Concrete | M20               | 29/04/2021      | 27/05/2021      | 149.27 X                          | 22642                           | 8.850                        | 527.5                | 23.3                                         |                                                      |
|         |                            |                   |                 |                 | 151.69 X                          |                                 |                              |                      |                                              |                                                      |
|         |                            |                   |                 |                 | 149.86                            |                                 |                              |                      |                                              |                                                      |

\* The results obtained are satisfactory as per standard requirements.

**Notes:**

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ಸಹಾಯಕ ಕಮಿಷನರ ಶಾಖೆ ಅಧೀನದಲ್ಲಿ  
ಯುಕ್ತರ ಸಹನಗರ ಸಾಹಿತ್ಯ,  
ಬಿ.ಬಿ.ಬಿ.ಬಿ. ಬೆಂಗಳೂರು-108



FOR CIVIL Pro.

**K. KARTHIK RECHAN**  
Authorized Signatory  
Quality Manager

Page 1/1

\*\*\*\*End of Report\*\*\*\*

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL  
WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES



AN ISO 9001 : 2008 COMPANY & NABL ACCREDITED LABORATORY AS PER ISO/IEC 17025:2017

# 4, 7TH MAIN MALLESWARAM, BANGALORE -3

Certificate No.: TC-5548

Format No: CP/TF/01

## TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2021-10-12-16  
 Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
 Agency : Sri Ravikumar Gangadhar No:17, Ambedkar layout, 3rd Cross, Magadur Main, Vijayanagara, Bangalore-560023  
 Customer's Reference : BBMP/EE/YNK D/EPMT-5/W.O/212/2020-21  
 Source of Sample : Sample supplied by Agency  
 Sample Condition : Satisfactory  
 Date of Receipt : 01-05-21  
 Customer ID : Drain Bottom Slab Concrete  
 Sample Type /Size : 150X150X150 mm  
 Sample grade/Age : M20 / 28 Days Compressive Strength  
 Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete CI.5

Date of test : 27/05/2021

| SL No. | Identification Mark        | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|--------|----------------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1      | Drain Bottom Slab Concrete | M20               | 29/04/2021      | 27/05/2021      | 150.24 X<br>150.88 X<br>149.45 | 22669                        | 8.195                     | 529.2             | 23.3                                      | 23.1                                              |
| 2      | Drain Bottom Slab Concrete | M20               | 29/04/2021      | 27/05/2021      | 150.74 X<br>149.36 X<br>149.59 | 22515                        | 8.449                     | 506.4             | 22.5                                      |                                                   |
| 3      | Drain Bottom Slab Concrete | M20               | 29/04/2021      | 27/05/2021      | 149.98 X<br>150.50 X<br>151.72 | 22572                        | 8.850                     | 532.3             | 23.6                                      |                                                   |

\* The results obtained are satisfactory as per standard requirements.

Note:

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Page 1/1

\*\*\*\*End of Report\*\*\*\*



FOR CIVIL PRO

R. KARTHIK RECHAN  
Authorized Signatory  
Quality Manager

M : 9972924526 | Tel : +91 80 23444801 | e : rechan6630@yahoo.co.in, civilproexperts@gmail.com

HIGHWAY & BUILDING MATERIALS TESTING LABORATORY | STRUCTURAL | ENVIRONMENTAL  
 WATER TESTING | GEO TECHNICAL | PROJECT MANAGEMENT | SURVEYING SERVICES



Format No: CP/TF/01

## TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2021-10-12-16 Date: 07/05/2021  
 Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
 Agency : Sri.Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
 Customer's Reference : BBMP/EE/YNK D/EPMT-5/W O/212/2020-21  
 Source of Sample : Sample supplied by Agency  
 Sample Condition : Satisfactory  
 Date of Receipt : 03-05-21  
 Customer ID : Drain Side wall Concrete  
 Sample Type /Size : 150X150X150 mm  
 Sample grade/Age : M20 / 7 Days Compressive Strength  
 Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl.5  
 Date of test : 07/05/2021

| SL No. | Identification Mark      | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|--------|--------------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1      | Drain Side wall Concrete | M20               | 30/04/2021      | 07/05/2021      | 151.37 X<br>150.06 X<br>149.92 | 22715                        | 8.630                     | 413.9             | 18.2                                      | 18.5                                              |
| 2      | Drain Side wall Concrete | M20               | 30/04/2021      | 07/05/2021      | 150.55 X<br>149.71 X<br>149.22 | 22539                        | 8.196                     | 420.2             | 18.6                                      |                                                   |
| 3      | Drain Side wall Concrete | M20               | 30/04/2021      | 07/05/2021      | 150.91 X<br>150.33 X<br>150.65 | 22686                        | 8.080                     | 419.7             | 18.5                                      |                                                   |

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*Handwritten signature and stamp:*  
 CIVIL PRO  
 4, 7TH MAIN MALLESWARAM, BANGALORE -3



FOR CIVIL PRO.  
 R KARTHIK RECHAN  
 Authorized Signatory  
 Quality Manager

Page 1/1

\*\*\*\*End of Report\*\*\*\*



Format No: CP/TF/01

## TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2021-10-12-16 Date: 07/05/2021

Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore

Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore

Project Name : "Improvements to Roads and drains at Bettahalli Colony (inward) Road of Yelahanka satellite town Sub division"

Agency : Sri.Ravikumar Gangadhar No:17, Ambedkar layout, 3rd Cross, Magdalla Main/Vijayanagara, Bangalore-560023

Customer's Reference : BBMP/EE/YNK.D/EPMT-5/W.O/212/2020-21

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 03-05-21

Customer ID : Drain Side wall Concrete

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M20 / 7 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete

Date of test : 07/05/2021

| Sl. No. | Identification Mark      | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (kN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|---------|--------------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1       | Drain Side wall Concrete | M20               | 30/04/2021      | 07/05/2021      | 150.72 X                       | 22506                        | 86300                     | 42260             | 18.7                                      | 18.7                                              |
|         |                          |                   |                 |                 | 149.52 X                       |                              |                           |                   |                                           |                                                   |
|         |                          |                   |                 |                 | 149.05                         |                              |                           |                   |                                           |                                                   |
| 2       | Drain Side wall Concrete | M20               | 30/04/2021      | 07/05/2021      | 150.15 X                       | 22755                        | 86196                     | 42262             | 18.9                                      |                                                   |
|         |                          |                   |                 |                 | 151.55 X                       |                              |                           |                   |                                           |                                                   |
|         |                          |                   |                 |                 | 150.11                         |                              |                           |                   |                                           |                                                   |
| 3       | Drain Side wall Concrete | M20               | 30/04/2021      | 07/05/2021      | 150.26 X                       | 22811                        | 86080                     | 42265             | 18.7                                      |                                                   |
|         |                          |                   |                 |                 | 151.81 X                       |                              |                           |                   |                                           |                                                   |
|         |                          |                   |                 |                 | 150.02                         |                              |                           |                   |                                           |                                                   |

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85  
The above mentioned  
signature is not valid  
as per the contract-100



FOR CIVIL PRO.

R. ARTHIK RECHAN  
Authorized Signatory  
Quality Manager

Page 1/1

\*\*\*\*End of Report\*\*\*\*



Format No: CP/TF/01

## TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2021-10-12-16  
 Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
 Agency : Sri.Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
 Customer's Reference : BBMP/EE/YNK D/EPMT-5/W.O/212/2020-21  
 Source of Sample : Sample supplied by Agency  
 Sample Condition : Satisfactory  
 Date of Receipt : 22-05-21  
 Customer ID : Cement Concrete Pavement  
 Sample Type /Size : 150X150X150 mm  
 Sample grade/Age : M30 / 7 Days Compressive Strength  
 Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete CI 5

Date of test : 27/05/2021

| SL No. | Identification Mark      | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq. mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|--------|--------------------------|-------------------|-----------------|-----------------|--------------------------------|-------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1      | Cement Concrete Pavement | M30               | 20/05/2021      | 27/05/2021      | 151.66 X<br>149.08 X<br>151.02 | 22609                         | 8.055                     | 574.3             | 25.4                                      | 25.4                                              |
| 2      | Cement Concrete Pavement | M30               | 20/05/2021      | 27/05/2021      | 149.55 X<br>151.49 X<br>151.48 | 22654                         | 8.984                     | 605.0             | 26.7                                      |                                                   |
| 3      | Cement Concrete Pavement | M30               | 20/05/2021      | 27/05/2021      | 150.42 X<br>151.98 X<br>149.16 | 22862                         | 8.966                     | 550.1             | 24.1                                      |                                                   |

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ಇವುಗಳ ಮೇಲೆ ಪರೀಕ್ಷೆ ಮಾಡಿದರೆ  
 ಯಾವುದೇ ತಪ್ಪುಗಳಿಲ್ಲವೆಂದು  
 ದೃಢೀಕರಿಸಲಾಗಿದೆ.



FOR CIVIL PRO

KARTHIK RECHAN  
 Authorized Signatory  
 Quality Manager

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\*\*\*\*End of Report\*\*\*\*

## TEST REPORT OF CEMENT CONCRETE CUBES

Format No. CP/TF/01

Lab ID : CP-2021-10-12-16  
Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
Agency : Sri.Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
Customer's Reference : BBMP/EE/YNK D/EPMT-5/W.O/212/2020-21  
Source of Sample : Sample supplied by Agency  
Sample Condition : Satisfactory  
Date of Receipt : 22-05-21  
Customer ID : Cement Concrete Pavement  
Sample Type /Size : 150X150X150 mm  
Sample grade/Age : M30 / 28 Days Compressive Strength  
Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete CI 5  
Date of test : 17/06/2021

| Sl. No. | Identification Mark      | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|---------|--------------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 151.91 X<br>151.18 X<br>150.61 | 22967                        | 8.428                     | 764.6             | 33.3                                      | 33.2                                              |
| 2       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 151.69 X<br>150.66 X<br>151.18 | 22854                        | 8.311                     | 742.2             | 32.5                                      |                                                   |
| 3       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 150.21 X<br>151.53 X<br>150.03 | 22762                        | 8.859                     | 772.0             | 33.9                                      |                                                   |

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ಇದರಲ್ಲಿ ಉಲ್ಲೇಖಿಸಿದ ಮಾಹಿತಿಗಳು  
ಯಾವುದೇ ಸುಪರಿಕರಿಸಿದ ಮಾಹಿತಿಗಳಾಗಿಲ್ಲ.  
೨೦.೦೬.೨೦೨೧. ಬೆಂಗಳೂರು-೧೦೬



FOR CIVIL Pro.  
KARTHIK RECHAN  
Authorized Signatory  
Quality Manager

## TEST REPORT OF CEMENT CONCRETE CUBES

Format No: CP/TF/01

CT-2021-10-12-16

Date: 27/05/2021

Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.

Yelahanka Satellite Town Sub Division, BBMP, Bangalore.

"Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"

Sri.Ravikumar Gangadhar No:17, Ambedkar layout, 3rd Cross, Magadur Main, Vijayanagara, Bangalore-560023

BBMP/EE/VNK/D/EPMT-5/W.O.212/2020-21

Sample supplied by Agency

Satisfactory

22-04-21

Cement Concrete Pavement

150X150X150 mm

M30 / 7 Days Compressive Strength

IS:516-1959 Methods of Tests for Strength of Concrete C15

27/05/2021

| Sl. No. | Identification           | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|---------|--------------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1       | Cement Concrete Pavement | M30               | 26/05/2021      | 27/05/2021      | 150.67 X<br>150.40 X<br>151.27 | 22661                        | 8.055                     | 576.0             | 25.4                                      | 25.6                                              |
| 2       | Cement Concrete Pavement | M30               | 26/05/2021      | 27/05/2021      | 149.84 X<br>149.64 X<br>151.78 | 22422                        | 8.984                     | 599.1             | 26.7                                      |                                                   |
| 3       | Cement Concrete Pavement | M30               | 26/05/2021      | 27/05/2021      | 149.26 X<br>151.31 X<br>151.65 | 22585                        | 8.966                     | 556.8             | 24.7                                      |                                                   |

The test results are subject to the standard requirements.

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R KARTHIK RECHAN  
Authorized Signatory  
Quality Manager

Page 1/1

\*\*\*End of Report\*\*\*

## TEST REPORT OF CEMENT CONCRETE CUBES

Format No: CP/TF/01

Lab ID : CP-2021-10-12-16  
Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
Agency : Sri Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
Customer's Reference : BBMP/EE/YNK D/EPMT-5/W O/212/2020-21  
Source of Sample : Sample supplied by Agency  
Sample Condition : Satisfactory  
Date of Receipt : 22-05-21  
Customer ID : Cement Concrete Pavement  
Sample Type /Size : 150X150X150 mm  
Sample grade/Age : M30 / 28 Days Compressive Strength  
Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete C15  
Date of test : 17/06/2021

| Sl. No. | Identification Mark      | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|---------|--------------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 151.56 X<br>150.45 X<br>150.29 | 22803                        | 8.428                     | 752.9             | 33.0                                      | 32.7                                              |
| 2       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 151.26 X<br>149.88 X<br>150.81 | 22670                        | 8.311                     | 727.1             | 32.1                                      |                                                   |
| 3       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 149.37 X<br>150.29 X<br>149.99 | 22450                        | 8.859                     | 742.8             | 33.1                                      |                                                   |

\* The results obtained are satisfactory as per standard requirements.

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ಅಧಿಕಾರಿಗಳ ಸಹಿ ಮತ್ತು ಮುದ್ರೆಗಳಿಲ್ಲದೆ  
ಒಪ್ಪಿಗೆಯಿಲ್ಲ. ದಿನಾಂಕ: 17/06/2021



FOR CIVIL Pro.  
*[Signature]*  
R KARTHIK RECHAN  
Authorized Signatory  
Quality Manager

## TEST REPORT OF CEMENT CONCRETE CUBES

Format No: CP/TF/01

Lab ID : CP-2021-10-12-16 Date: 17/06/2021

Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.

Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.

Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"

Agency : Sri.Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023

Customer's Reference : BBMP/EE/YNK D/EPMT-5/W.O/212/2020-21

Source of Sample : Sample supplied by Agency

Sample Condition : Satisfactory

Date of Receipt : 22-05-21

Customer ID : Cement Concrete Pavement

Sample Type /Size : 150X150X150 mm

Sample grade/Age : M30 / 28 Days Compressive Strength

Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete CI.5

Date of test : 17/06/2021

| Sl. No. | Identification Mark      | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|---------|--------------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 149.48 X<br>151.80 X<br>149.98 | 22691                        | 8.428                     | 771.3             | 34.0                                      | 33.2                                              |
| 2       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 150.65 X<br>150.81 X<br>149.86 | 22720                        | 8.311                     | 737.6             | 32.5                                      |                                                   |
| 3       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 149.52 X<br>149.52 X<br>151.18 | 22356                        | 8.859                     | 738.8             | 33.0                                      |                                                   |

\* The results obtained are satisfactory as per standard requirements.

Note:

The results pertain to the samples received and tested.

All information furnished by Customer/Representative

Any correction in the report will make this report invalid

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Samples will be disposed after 30 days from the date of issue of test certificate



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R. KARTHIK RECHAN  
Authorized Signatory  
Quality Manager

Page 1/1

\*\*\*\*End of Report\*\*\*\*

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## TEST REPORT OF CEMENT CONCRETE CUBES

Format No: CP/TF/01

Lab ID : CP-2021-10-12-16  
Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
Agency : Sri.Ravikumar Gangadhar No:17,Ambekar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
Customer's Reference : BBMP/EE/YNK.D/EPMT-5/W.O/212/2020-21  
Source of Sample : Sample supplied by Agency  
Sample Condition : Satisfactory  
Date of Receipt : 22-05-21  
Customer ID : Cement Concrete Pavement  
Sample Type /Size : 150X150X150 mm  
Sample grade/Age : M30 / 28 Days Compressive Strength  
Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete C15  
Date of test : 17/06/2021

| Sl. No. | Identification Mark      | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|---------|--------------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 150.60 X<br>150.19 X<br>151.77 | 22618                        | 8.428                     | 751.7             | 33.2                                      | 33.3                                              |
| 2       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 151.95 X<br>151.51 X<br>149.68 | 23021                        | 8.311                     | 754.5             | 32.8                                      |                                                   |
| 3       | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 150.97 X<br>150.69 X<br>149.17 | 22750                        | 8.859                     | 768.8             | 33.8                                      |                                                   |

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Note:

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R. KARTHIK RECHAN  
Authorized Signatory  
Quality Manager

Format No: CP/TF/01

## TEST REPORT OF CEMENT CONCRETE CUBES

Lab ID : CP-2021-10-12-16 Date: 17/06/2021  
Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
Agency : Sri.Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
Customer's Reference : BBMP/EE/YNK D/EPMT-5/W.O/212/2020-21  
Source of Sample : Sample supplied by Agency  
Sample Condition : Satisfactory  
Date of Receipt : 22-05-21  
Customer ID : Cement Concrete Pavement  
Sample Type /Size : 150X150X150 mm  
Sample grade/Age : M30 / 28 Days Compressive Strength  
Reference to BIS codes : IS: 516 - 1959 Methods of Tests for Strength of Concrete Cl 5  
Date of test : 17/06/2021

| Sl No. | Identification Mark      | Grade of concrete | Date of Casting | Date of Testing | Dimension of the Specimen (mm) | Cross sectional area (Sq.mm) | Weight of the sample (kg) | Failure Load (KN) | Compressive strength (N/mm <sup>2</sup> ) | Average Compressive Strength (N/mm <sup>2</sup> ) |
|--------|--------------------------|-------------------|-----------------|-----------------|--------------------------------|------------------------------|---------------------------|-------------------|-------------------------------------------|---------------------------------------------------|
| 1      | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 150.78 X<br>150.72 X<br>151.96 | 22726                        | 8.428                     | 753.4             | 33.2                                      | 33.1                                              |
| 2      | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 150.20 X<br>150.55 X<br>151.38 | 22612                        | 8.311                     | 727.1             | 32.2                                      |                                                   |
| 3      | Cement Concrete Pavement | M30               | 20/05/2021      | 17/06/2021      | 151.88 X<br>150.23 X<br>150.19 | 22818                        | 8.859                     | 772.6             | 33.9                                      |                                                   |

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Note:

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R. KARTHIK RECHAN  
Authorized Signatory  
Quality Manager

## TEST RESULTS OF GRADATION FOR WMM

Lab ID : CP-RW-2021-10-12-16  
Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore. Date: 24-02-21  
Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
Agency : Sri.Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
Customer Reference : BBMP/EE/YNK.D/EPMT-5/W.O/212/2020-21  
Source of Sample : Sample supplied by Agency  
Sample Condition : Satisfactory  
Date of Receipt : 22-02-21  
Type of Mix : WMM ( Wet Mix Macadam)  
Date of Test : 22-02-21  
Oven Dry Weight : 11000 Grams

| IS Sieve Size(mm) | Weight Retained (gm) | Cumulative Weight Retained (gm) | % Cumulative Weight Retained | % Passing | Spec.I.Vide Table 400.13 MORTH Specification |
|-------------------|----------------------|---------------------------------|------------------------------|-----------|----------------------------------------------|
| 53                | 0                    | 0                               | 0.0                          | 100.0     | 100                                          |
| 45                | 315                  | 315                             | 2.9                          | 97.1      | 95-100                                       |
| 22.4              | 2259                 | 2574                            | 23.4                         | 76.6      | 60-80                                        |
| 11.2              | 2179                 | 4753                            | 43.2                         | 56.8      | 40-60                                        |
| 4.75              | 2251                 | 7004                            | 63.7                         | 36.3      | 25-40                                        |
| 2.36              | 1621                 | 8625                            | 78.4                         | 21.6      | 15-30                                        |
| 0.6               | 623                  | 9248                            | 84.1                         | 15.9      | 8-22                                         |
| 0.075             | 1338                 | 10586                           | 96.2                         | 3.8       | 0-5                                          |

\*The results obtained are satisfactory as per standard requirements.

The results pertain to the samples received and tested.

All information Furnished by Customer/ Representative

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ಇದನ್ನು ಬಳಸಬಾರದು-100



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Authorized Signatory  
Quality Manager



## DETERMINATION OF FLAKINESS INDEX AND ELONGATION INDEX OF COARSE AGGREGATE (IS 2386 (Part 1) 1963 (RA 2007))

Lab ID : CP-RW-2021-10-12-16 Date: 24-02-21  
 Customer : Assistant Executive Engineer, Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Address : Yelahanka Satellite Town Sub Division, BBMP, Bangalore.  
 Project Name : "Improvements to Roads and drains at Bettahalli Colony in ward no:03 of Yelahanka satellite town Sub division"  
 Agency : Sri.Ravikumar Gangadhar No:17,Ambedkar layout, 3rd Cross,Magadir Main,Vijayanagara, Bangalore-560023  
 Customer Reference : BBMP/EE/YNK.D/EPMT-5/W.O/212/2020-21  
 Source of Sample : Sample supplied by Agency  
 Sample Condition : Satisfactory  
 Date of Receipt : 22-02-21  
 Type of Mix : Coarse Aggregate for WMM ( Wet Mix Macadam)  
 Date of Test : 22-02-21  
 Result:

| Index                                           | Percentage of Flakiness and Elongation Index | Secified limits as per MORTH specification table 400-12      |
|-------------------------------------------------|----------------------------------------------|--------------------------------------------------------------|
| Flakiness Index                                 | 12.8%                                        | Combined Flakiness & Elongation Index for WMM is Maximum 35% |
| Elongation Index                                | 12.5%                                        |                                                              |
| Combined Flakiness and Elongation Index for WMM | 25.3%                                        |                                                              |

\* The results obtained are satisfactory as per standard requirements.

Note:-

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